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BRIEFS

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IN THE

Supreme Court of the United States

BEVERLY R. GILL, *et al.*,

Appellants,

v.

WILLIAM WHITFORD, *et al.*,

Appellees.

On Appeal from the United States District Court for the Western District of Wisconsin

BRIEF OF ROBIN BEST, SHAWN J. DONAHUE, JONATHAN KRASNO, DANIEL B. MAGLEBY AND MICHAEL D. McDONALD AS *AMICI CURIAE* IN SUPPORT OF APPELLEES

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Vieth v. Jubelirer,
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Other Authorities

Altman, Micah and McDonald, Michael P., BARD: ***Better Automated Redistricting***, J. Statistical Software 42:2-36 (2011).....13

Backstrom, Charles, Robbins, Leonard, and Eller, Scott, ***Issues in Gerrymandering: An Exploratory Measure of Partisan Gerrymandering Applied to Minnesota***, Minn. L. Rev. 62: 1121-1159 (1978).....8

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Chen, Jowei and Rodden, Jonathan, ***Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures***, Q. J. Pol Sci. 8: 239-269 (2013).....12, 13

Cho, Wendy Tam and Liu, *Yan Y.*,
Toward a Talismanic Redistricting Tool: A Fully Balanced Computational Method for Identifying Extreme Redistricting Plans, Election L. J. 15(4): 351-366 (2016).....13

Cirincione, Carmen, Darling, Thomas A. and O'Rourke, Timothy,
Assessing South Carolina's 1990 Congressional Districting, Pol. Geography 19: 189-211 (2000).....13

Daley, David, *Ratf**ked: The True Story Behind the Secret Plan to Steal America's Democracy*, New York: Liveright Publishing (2016).....17

Engstrom, Richard L. and Wildgen, John K. ,
Pruning Thorns from the Thicket: An Empirical Test of the Existence of Racial Gerrymandering, Legis. Stud. Q. 2:465-79 (1977).....13

Erikson, Robert S., Malapportionment,
Gerrymandering, and Party Fortunes in Congressional Elections, Am. Pol. Sci. Rev. 66: 1234-45, *1237 (1972).....9-10, 12

Finkel, Steven E., *Reciprocal Effects of Participation and Political Efficacy: A Panel Study*, Am. J. Pol. Sci. 29:891-913 (1985).....17

Gul, Faruk and Pesendorfer, Wolfgang,
Strategic Redistricting, Am. Econ. Rev. 100:1616-41 (2010).....7

Key, V.O., *Southern Politics in State and Nation*. Knoxville: University of Tennessee Press (1949).....8

Nagel, Stuart, *Simplified Bipartisan Computer Redistricting*, Stanford L. Rev. 17: 863-9 (1965).....13

Owen, Guillermo and Grofman, Bernard, *Optimal Partisan Gerrymandering*, Pol. Geography Q. 7:5-22 (1988).....7

INTERESTS OF *CURIAE*[1]

Amici curiae are professors of Political Science at Binghamton University who specialize in American and Comparative Politics and a PhD Student in Political Science at Binghamton University who has focused his studies on American Politics.

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Amicus Shawn J. Donahue is a PhD Student in Political Science at Binghamton University and a JD from the University of Indiana, Bloomington, whose publications include Considering the Prospects for Establishing a Packing Gerrymandering Standard, ***Election Law Journal*** forthcoming.

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[1] No counsel for a party authored the brief in whole or in part. No counsel, party, or any other person or entity, other than the ***amici curiae*** and their counsel, made a monetary contribution to the preparation or submission of the brief. All parties have consented in writing to the filing of timely ***amicus curiae*** briefs in support of either party or neither party through letters on file with the Clerk.

Amicus Jonathan Krasno is an Associate Professor of Political Science, whose publications include Considering the Prospects for Establishing a Packing Gerrymandering Standard, ***Election Law Journal*** forthcoming; Detecting Florida's Gerrymander: A Lesson for Law and Social Science, ***Social Science Quarterly***, forthcoming; and Do Televised Presidential Ads Increase Voter Turnout? Evidence from a Natural Experiment, ***Journal of Politics*** 70: 245-61 (Krasno, Jonathan and Green, Donald P. 2008.)

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INTRODUCTION

Supreme Court precedent holds that political considerations will likely play an important and proper role in the drawing of district boundaries. *Vieth v. Jubelirer*, 541 U.S. 267, 299 (2004). The fundamental issue, however, is finding the proper methodology to draw the line between "good politics and bad politics." *Id.* As Justice Kennedy described in *Vieth*, *supra*, "full analytical satisfaction" is required to do so. *Id.* at 312. Full analytical satisfaction is now available. One such method in use for more than a century is comparing the partisan median district (the middle) to the partisan mean district (the average). This comparison offers statistical confirmation of the lower court's decision that Wisconsin's State Assembly boundaries are gerrymandered to advantage Republican voters at the expense of Democrats. Furthermore, modern computers and access to information unearthed a new application for this analytical approach. *Amici* used modern computer software to produce 10,000 alternative Assembly maps with 99 equally populated and contiguous districts. These alternative maps were generated only with reference to residential geography and are partisan blind; electoral data were added later. These maps thus reflect what this Court has referred to as the "natural" gerrymander. *Amici* analyzed the median and mean in these 10,000 alternatives and the enacted Wisconsin map which is the subject of Act 43. Their findings show that the Assembly boundaries enacted in Wisconsin substantially disadvantage Democrats beyond the effects of residential geography. This confirmed what the lower courts found – that gerrymandering occurred in Wisconsin. *Amici*'s method of analysis

does not rely on shapes, intent, or subjective notions of fairness in the political process. It simply relied on data from elections immediately before and after the 2011 redistricting plus 10,000 computer simulations. Ironically, the same computers used to gerrymander detect gerrymandering.

SUMMARY OF ARGUMENT

Amici, a group of quantitatively-oriented political scientists specializing in American and Comparative electoral systems, have worked together and separately on a variety gerrymandering projects including an extensive analysis of Wisconsin's Assembly districts. This brief reports the key findings from that analysis, which uses a simple diagnostic tool long available to detect gerrymanders: a comparison of district-level median and mean. A notable feature of that analysis is a comparison set of 10,000 alternative Wisconsin State Assembly maps created by computer without reference to any political variables or history. The districts in these maps are contiguous and equally populated, as is required under Wisconsin law, and they provide a baseline with which to distinguish between the effect of residential geography and the Legislature's actions. The results show that Wisconsin's Assembly map is a substantial gerrymander that dilutes the strength of Democratic voters.

Oddly shaped or non-compact districts may often be a byproduct of gerrymandering but, by themselves, shapes and/or compactness can neither prove nor disprove the existence of a gerrymander. As a result, the State's claim that Wisconsin's Assembly districts cannot be gerrymandered because the

districts are relatively compact or they keep a relatively large number of jurisdictions whole is essentially irrelevant.

The central action element in gerrymandering is diluting the opposition's voting strength. It is this dilution which produces the unfair advantage enjoyed by the other party and which may result in oddly shaped districts. In the case of partisan gerrymandering, *amici* would argue – along with the vast majority of fellow political scientists – that the most fundamental goal of major political parties is to win control of government. Applied to legislative elections, a party's first goal is to carry a majority of seats.

Carrying a majority of seats is generally simple when the party that controls mapping also consistently wins a majority of votes. But what if its majority is tenuous? In that case, gerrymandering can make it far more likely that a redistricting party will carry a majority of seats with less than a majority of votes. This is exactly what has been alleged in Wisconsin. Professor Keith Gaddie, a consultant hired by the Legislature to assist in redistricting, testified in this case that mapmakers calculated that Democrats would have to win at least 54% of the statewide vote to win 50% + 1 of Wisconsin's Assembly seats. Judging from the results of actual elections, his calculation was remarkably accurate:

- In 2010 the Democratic Secretary of State candidate, Doug La Follette, received 51.6 percent of the two-party vote but carried just 43 of the State's 99 districts.

- In the same election year, the Republican gubernatorial candidate, Scott Walker, received 52.3 percent of the two-party vote, seven-tenths of a percentage point higher than La Follette, and carried 65 of 99 districts. The Republican candidate for U.S. Senate, Ron Johnson, did slightly worse than Walker with 51.9 percent of the two-party vote, yet carried 66 of 99 districts.

- In 2012 the Democratic presidential candidate, Barack Obama, received 53.5 percent of the two-party vote, and carried just 43 of 99 districts.

- The 2012 U.S. Senate election saw Democrat, Tammy Baldwin, win 51.4 percent of the vote (52.9 two-party) and carry 44 of 99 districts.

- In 2014, Republican candidates for Governor, Attorney General, and Treasurer won, respectively, 52.8, 53.1, and 52.1 percent of the major two-party vote. All three carried a large majority of Assembly districts (Governor 64, Attorney General 64, and Treasurer 62.) By comparison, the Democratic candidate for Secretary of State that year won 52 percent of the major two-party vote but carried just 43 districts.

These results are red flags that Wisconsin's political boundaries treat Democrat and Republican votes differently. There is a clear asymmetry that is observed. Statewide assembly results which nearly mirror one another for Democrats and Republicans, translate into fewer Assembly seats for the

Democrats. While each ballot counts as precisely one vote wherever it is cast, the way these votes are aggregated within Assembly districts created by Act 43 appears to disadvantage Democrats' ability to win a majority of Assembly seats. In short, there is good reason to suspect that Act 43 gives an unfair advantage to Republicans in Wisconsin by diluting the voting strength of Wisconsin's Democrats.

Finally, gerrymanders typically include some combination of "packing" where the disadvantaged party's voters are concentrated in as few districts as possible, and "cracking" where the disadvantaged party's voters are split so they fall short of a majority in as many districts as possible. This insight about primacy of packing, particularly in politically competitive states like Wisconsin, is widely recognized within political science and economics. *See,* Owen, Guillermo and Grofman, Bernard, *Optimal Partisan Gerrymandering*, Pol. Geography Q. 7:5-22 (1988); Gul, Faruk and Pesendorfer, Wolfgang, *Strategic Redistricting*, Am. Econ. Rev. 100:1616-41 (2010). Cracking would not mitigate the dilution of voting strength produced by packing. Accordingly, the analysis here focuses on packing.

ARGUMENT

I. Measuring Gerrymanders

Professor Gaddie's testimony in the lower court that Democrats would need at least 54% of statewide vote to carry a majority of Assembly districts came with a careful description of the extensive data analysis he performed to arrive at that estimate. *Amici* offer no commentary on that methodology.

Rather *amici* assert that there is a simple and accessible way to estimate the partisan bias created by differential packing by comparing the district-level partisan median and mean. This calculation is easy to perform and directly applicable to a claim of vote dilution.

Any set of legislative districts constitute a distribution. In partisan gerrymandering, the characteristic of interest in that distribution is the partisan voting or performance of each district. The easiest and most reliable way to observe these patterns is with statewide elections such as contests for President, U.S. Senator or Governor. Statewide elections are the basic ingredient in ecological inference studies produced by scholars and in scoring of district partisanship such as the well-known "partisan voting index" (i.e. PVI) compiled by the *Cook Political Report*. *See,* Key, V.O., *Southern Politics in State and Nation*. Knoxville: University of Tennessee Press (1949); Backstrom, Charles, Robbins, Leonard, and Eller, Scott, *Issues in Gerrymandering: An Exploratory Measure of Partisan Gerrymandering Applied to Minnesota*, Minn. L. Rev. 62: 1121-1159 (1978). According to the transcripts below, the people most closely involved in drawing Wisconsin's Assembly districts paid close attention to voting patterns in statewide elections.

The median district is the one in the middle of the distribution, the 50th most Republican or Democratic district among the 99 Assembly districts in Wisconsin. The mean is the average Republican or Democratic percentage across the 99 Assembly districts in Wisconsin. The mean represents a party's performance in an election while the median district

is the one that a party must carry in order to win a bare majority of Assembly seats. Thus, the median district can be understood as the target of would-be gerrymanders whether they conceive of it in these terms or not. Their maps adjust the partisan balance of the median to be more favorable to their party as possible. This occurs through packing which essentially concedes a minority of districts to the disadvantaged party, thus increasing the advantaged party's vote share in the remaining districts in which the median is located.

The significance of the median and the mean has long been recognized by scholars. Sir Francis Edgeworth, an Irish-Anglo mathematician, first suggested it in an essay about statistics in 1898. Edgeworth's main interest was exploring the properties of the normal distribution; he used political districting to illustrate how the distribution can be skewed to benefit a party. Robert Erikson, an American political scientist, invoked these characteristics of a distribution in his description of a gerrymander: "A good Republican gerrymander, for example, would have a majority of districts that are ***minimally*** safe for Republicans and a minority that are ***very*** safe for Democrats. In short, the distribution of the vote across districts would be heavily skewed in the direction of the disadvantaged Democratic party so that the ***mean*** district vote percentage for the Democratic party is greater than its ***median*** vote percentage. ... On the other hand, the perfect absence of a gerrymander would occur if the distribution of the vote across districts is symmetrical, such as with a normal distribution." ***See,*** Erikson, Robert S., Malapportionment, ***Gerrymandering, and Party Fortunes in Congressional Elections***, Am. Pol. Sci.

Rev. 66: 1234-45, *1237 (1972) (Emphasis in the original).

Wisconsin's Legislative Technology Service Bureau has produced estimates of statewide election results within wards created in 2011 for elections conducted from 1992 to the present. Presumably, these data were relied upon by the State during the redistricting process in 2011. For our purposes, they make it simple to see each candidate's performance under the current set of political boundaries. These results are presented in Table One, which provides summary information about the 13 statewide races, including the 2012 gubernatorial recall, conducted in the two election cycles immediately preceding and following 2011. The results exclude third parties and present the Democratic share of the two-party vote.[2] The results range from an 11-point Democratic victory (in the 2008 presidential race) to a 12-point Democratic defeat (in the 2010 contest for Attorney General), with the remaining eleven races decided by 7 percentage points or less. Republicans won eight of these races and Democrats five. Despite this variation in outcomes and the span of eight years, geographic voting patterns were highly stable.[3] This

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[2] Third-party candidates combined carried no more than 2.9% of the vote in any of these races and no group of third-party candidates carried more than 6.4% of the vote in total. Third-party candidates are essentially irrelevant to the machinations of partisan gerrymandering where elections are dominated by two major parties.

[3] *Amici* assessed the stability of voting patterns by examining the ward-level correlations of Democratic voting across all 13 elections. The correlations were uniformly high: the lowest coefficient was .885 and the mean exceeded .93. In short, wards

lends support to the assumption that must underlie any effort to manipulate boundaries for partisan advantage: that the vast majority of voters are sufficiently partisan to predict their behavior in future elections.

This electoral history demonstrates that Wisconsin is a closely divided state where either party might reasonably expect to win control of its State Assembly. The last column in Table One shows, however, that Republican control of that body is practically assured in any environment short of a Democratic landslide due to the way Assembly districts have been drawn. In every single election, no matter which party wins or by how much, the median Assembly district is substantially less Democratic than is the district-level mean. That mean closely tracks Democrats' percentage of the statewide vote. The median district, the one which can be manipulated by packing, remains significantly less Democratic throughout this series of elections.

The size of this difference ranges from 3.84 to 6.33, always favoring Republicans. Assuming a semi-uniform vote swing (which is an accurate description of voting in Wisconsin), this means that a Democrat would need to win 50% of the vote plus the difference between median and mean (*e.g.*, 50 + 3.84) in order to carry the median district needed for a bare majority in the Assembly. In other words, a Democrat must win approximately 54 to 56% of the statewide two-party vote to carry the median district, while a Republican must win just 44 to 46% of the statewide

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maintained their relative positions to one another in Democratic voting even as election results varied.

two-party vote. This, of course, is consistent with Professor Gaddie's estimate in the lower court. More important, it shows that when it comes to controlling the State Assembly, the enacted Assembly map creates a situation where votes cast for Republicans simply matter more than do votes cast for Democrats.

II. Distinguishing Between Residential Geography and the Actions of the Legislature

In Wisconsin and elsewhere, legislatures have argued that district boundaries simply reflect the way residents choose to live. It is well-known that most large cities contain large numbers of Democratic voters in higher concentrations than can usually be found in the most Republican neighborhoods. This has led to a phenomenon known as the "natural," "accidental," or "unintentional" gerrymander. *See,* Erikson, Robert S., Malapportionment, *Gerrymandering, and Party Fortunes in Congressional Elections*, Am. Pol. Sci. Rev. 66: 1234-45, *1237 (1972); Chen, Jowei and Rodden, Jonathan, *Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures,* Q. J. Pol Sci. 8: 239-269 (2013). In short, if many Democrats essentially pack themselves, is it the State's fault that its Assembly map contains many highly packed Democratic districts and less packed Republican ones? Setting aside the normative question of whether the State or this Court should accept high levels of vote dilution produced by residential geography if much fairer arrangements are possible, *amici* turn to the question of distinguishing between impact of geography and the Legislature.

To do so, it is necessary to construct a neutral baseline, a set of alternative Assembly maps produced only with reference to the relevant aspects of residential geography, contiguity and population. Nobel Laureate William Vickrey suggested in 1961 that one day it would be possible to harness the power of computers to draw large numbers of partisan blind districting plans. This project advanced in modest ways in the 1960s and 1970s. *See,* Nagel, Stuart, ***Simplified Bipartisan Computer Redistricting***, Stanford L. Rev. 17: 863-9 (1965); Engstrom, Richard L. and Wildgen, John K., ***Pruning Thorns from the Thicket: An Empirical Test of the Existence of Racial Gerrymandering***, Legis. Stud. Q. 2:465-79 (1977). With advances in processing speed, Vickrey's suggestion has moved to full-scale application. *See,* Chen, Jowei and Rodden, ***Jonathan, Unintentional Gerrymandering: Political Geography and Electoral Bias in Legislatures***, Q. J. Pol Sci. 8: 239-269 (2013); Cirincione, Carmen, Darling, Thomas A. and O'Rourke, Timothy, ***Assessing South Carolina's 1990 Congressional Districting***, Pol. Geography 19: 189-211 (2000); Altman, Micah and McDonald, Michael P., BARD: ***Better Automated Redistricting***, J. Statistical Software 42:2-36 (2011); Cho, Wendy Tam and Liu, ***Yan Y., Toward a Talismanic Redistricting Tool: A Fully Balanced Computational Method for Identifying Extreme Redistricting Plans***, Election L. J. 15(4): 351-366 (2016). While such a politically mindless approach is no substitute for the considered judgments of fair-minded authorities attuned to the social, political, and economic realities of their states, the power of computers can provide guidance as to the effect of residential patterns.

Accordingly, ***amici*** used a graph partitioning approach to generate a comparison set of 10,000 alternative Assembly maps by computer considering only contiguity and population. Each map is unique, and each contains 99 Assembly districts which are contiguous and have a maximum population variance of 1.5%. The process that produces these maps tends to yield relatively compact districts, though odd shapes do occur in the effort to balance population. After the maps were created, ***amici*** added election results using the same data from the Wisconsin Legislative Service Bureau. These maps are partisan blind and provide plausible estimates of any bias created by residential geography.

Figure One presents the difference between median and mean in these alternative maps in each statewide election via a series of stacked histograms. The X-axis is the size of this difference, and the Y-axis is the number of observations in a range. The solid vertical line in each panel is the observed median-mean difference in the enacted map from Table One. Virtually all of the 10,000 maps show median-mean difference greater than 0 in each election. This is precisely as expected: the high concentrations of Democrats in Milwaukee and Madison produce a natural gerrymander that favors Republicans in Wisconsin's Assembly. The magnitude of this bias shifts slightly depending on the election used to calculate it, but it mostly remains in the range of 1.5 to 3 points. This provides reassurance about the neutral mapping process for it captures the natural gerrymander that is widely suspected to exist in Wisconsin.

Notably, however, the vertical line representing the ***status quo*** is to the right of the bars of the histograms in each panel. In fact, the difference between the median and mean district in the enacted map is greater than the difference between median and mean in any of the 10,000 alternative maps in each election. In other words, the enacted map dilutes the voting strength of Democrats more than any of the 10,000 partisan-blind computer generated maps. This lack of overlap in any of the 130,000 separate comparisons made (10,000 maps x 13 elections versus the enacted map) is powerful evidence that the unfair treatment of Democratic voters in Wisconsin's Assembly map is greater than what a neutral redistricting process would produce in all but the most extreme circumstances.

To get a sense of the magnitude of the bias produced by residential geography and the Legislature, Figure Two graphs average median-mean difference in the 10,000 alternative maps and in the enacted one. The upper solid line graphs the median-mean difference reported in the last column of Table One, and the dashed line is the average median-mean difference in the 10,000 neutral maps in each election. The shaded area below that dashed line represents what ***amici*** have described as the natural gerrymander, while the textured area between the solid and dashed lines represents what ***amici*** would call the "unnatural gerrymander" or the contribution of Act 43 above and beyond the effect of residential geography. The thickness of this textured area varies from 2.19 to 3.09 points, and accounts for 51% of the total vote dilution observed in the 13 elections. It is clear that the residential choice made by Wisconsites and the actions of the Legislature both dilute the

voting strength of Democrats *vis-à-vis* winning control of the Assembly. However, any claim that the pro-Republican bias in the enacted map merely reflects Wisconsin's residential geography is plainly false. The Assembly districts drawn and adopted by the State go far beyond the effects of residential geography by further disadvantaging Democratic voters.

This additional dilution has a dramatic effect on Democrats' chances of winning control of the State Assembly for it effectively moves the necessary statewide performance from the category of a solid victory to a near landslide. The winning Democrat in the four relatively close races – Secretary of State in 2010 and 2014, and President and U.S. Senate in 2012 – carried 50 or more Assembly districts in the majority of the 10,000 neutral maps. In the enacted map, that candidate carried no more than 44 (Table One).

III. There is Empirical Evidence of Gerrymandering

Wisconsin's Assembly boundaries effectively dilute Democrats' voting strength and entrench a Republican majority in that body. The Assembly districts in Act 43 are clearly unfair in how they affect Democratic voters. Drawing districts to benefit one side is an ancient process which predates the term, "gerrymandering." *See,* Best, Robin, Donahue, Shawn J., Krasno, Jonathan, Magleby, Daniel B., and McDonald, Michael D., ***Considering the Prospects for Establishing a Packing Gerrymandering Standard,*** Election L. J., (forthcoming 2018). While it was difficult to assess the level and degree of gerrymandering long ago, it seems clear that

technological advances have made it much easier to produce gerrymanders and, very likely, easier to produce gerrymanders whose effects are more predictable and durable. Indeed, journalistic reporting indicates that efforts to gerrymander were carefully planned and coordinated in the run-up to and aftermath of the 2010 elections, and that both sides have begun to gear up for a battle royal to gain control of the redistricting process following the 2020 census. *See,* Daley, David, ***Ratf**ked: The True Story Behind the Secret Plan to Steal America's Democracy***, New York: Liveright Publishing (2016). Any potential problems emanating from gerrymandering seem likely to become worse in the future, not better.

Voters who believe their votes are irrelevant to the outcome, often referred to by political scientists as having low political "efficacy," are less likely to vote. *See,* Finkel, Steven E., ***Reciprocal Effects of Participation and Political Efficacy: A Panel Study***, Am. J. Pol. Sci. 29:891-913 (1985). Candidates and parties who believe that path to victory is too narrow often fail to compete. For example, Wisconsin has large variations in voter turnout across its 99 Assembly districts especially in non-presidential election years, and most of its Assembly seats are uncontested or lightly contested. It is correct to associate these unwelcome developments first with local characteristics like the potential competitiveness of a specific Assembly district. But legislation that makes it extremely unlikely for a party and its voters to attain their most cherished goal, control of government, will exacerbate those problems.

There are policy consequences to any election, too. The current arrangement in Wisconsin makes it extremely likely that Republicans will continue to control the State Assembly through the end of this decade and, depending on how the 2021 redistricting unfolds, possibly beyond. That means that any Republican governor will likely enjoy a relatively cooperative lower house while any Democratic governor will likely face obstruction from the lower house. The Constitution establishes a system of checks and balances which makes it difficult for any party to coordinate various actors necessary to achieve desired policy. By entrenching a Republican majority in its State Assembly, Act 43 essentially gives Republicans a significantly greater opportunity to make policy than it gives Democrats. This sort of policymaking asymmetry ought to be the choice of voters rather than attained by a structural bias introduced into the state by statute.

CONCLUSION

The longstanding median-mean approach confirms the findings of the lower courts using an alternative statistical method. The data reveals the scope and magnitude of the gerrymander that occurred in Wisconsin. Over the past decade, advances in computer science and its application to political science, created analytical tools that were not previously available. These tools detected gerrymandering in Wisconsin with "full analytical satisfaction." *Vieth* at 312. It is for this Court to decide whether this kind of gerrymandering is good politics or bad politics. *Id.* at 299.

Respectfully submitted,

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Table One- Thirteen statewide races in Wisconsin 2008-2014

Election	Democratic vote	Republican vote	Democratic %age	Number of districts carried by the Democrat	Median-mean (positive number = pro-Rep bias)
Pres 08	1,677,112	1,262,318	57.06	72	3.84
Senate 2010	1,020,895	1,125,944	47.55	33	5.76
Gov 2010	1,004,242	1,128,885	47.08	34	4.94
Atty Gen 2010	890,021	1,220,729	42.17	20	5.15
Sec State 2010	1,074,054	1,005,165	51.66	43	4.65
Treas 2010	958,410	1,101,264	46.53	34	4.99
Gov 2010 rec	1,335,585	1,164,480	46.58	33	6.33
Pres 2012	1,620,985	1,410,966	53.46	43	5.24
Senate 2012	1,547,104	1,380,126	52.85	44	4.17
Gov 2014	1,120,559	1,255,053	47.17	35	5.84
Atty Gen 2014	1,064,633	1,206,968	46.87	35	5.45
Sec State 2014	1,158,498	1,070,809	51.97	43	4.79
Treas 2014	1,024,238	1,116,012	47.86	37	5.3

Figure One

Comparing vote dilution in Wisconsin's Assembly District to 10,000 alternative districting plans

(X-axis = observed median-mean in a map; Y-axis = number of observations; vertical solid line = median-mean in the enacted map)

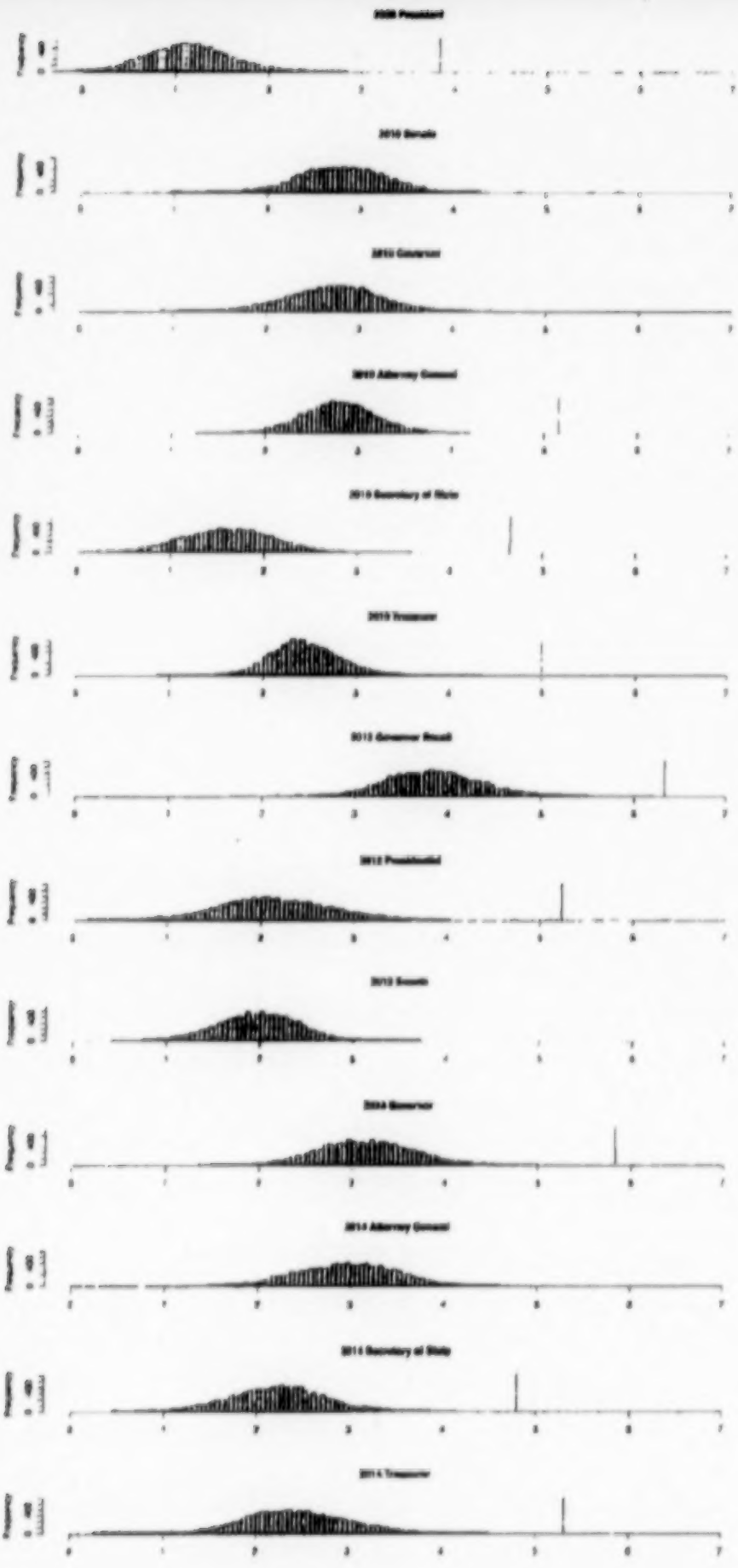

Figure Two: Distinguishing between the effect of residential geography and Act 43